RM User

Volume 6:2

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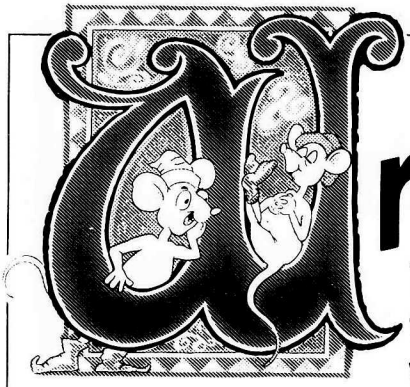
The magazine of the RM User Group



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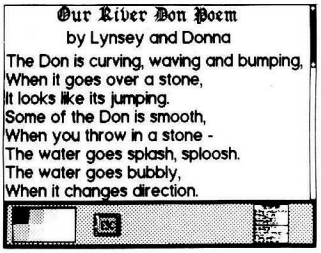
Our River Don Poem
by Lynsey and Donna
The Don is curving, waving and bumping,
When it goes over a stone,
It looks like its jumping.
Some of the Don is smooth,
When you throw in a stone -
The water goes splash, sploosh.
The water goes bubbly,
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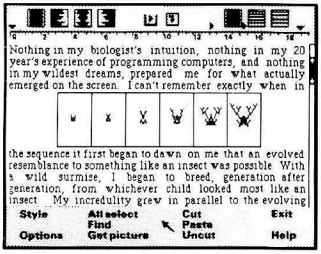
Nothing in my biologist's intuition, nothing in my 20 year's experience of programming computers, and nothing in my wildest dreams, prepared me for what actually emerged on the screen. I can't remember exactly when in
the sequence it first began to dawn on me that an evolved resemblance to something like an insect was possible. With a wild surmise, I began to breed, generation after generation, from whichever child looked most like an insect. My incredulity grew in parallel to the evolving
Style
All select
Cut
Exit
Find
Paste
Options
Get picture
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Help Line

According to the constitution the User Group exists *to promote the interchange of information and ideas between users of [RM] microcomputers.* There are two main ways in which this can happen. One of these is by using the magazine as a forum in which letters, articles or just short thoughts can be expressed and shared with other members. The other, and the more immediate, is to use the help line.

The User Group contains a great body of expertise and the Help Line exists as a channel for spreading knowledge and especially answers to your problems.

How does this differ from RM's Customer Support telephone service? Firstly, you can telephone the User Group members in the evening or at weekends when RM is shut (and, of course, you are just bound to hit problems). Secondly, RM don't claim to have great knowledge of products which they don't produce such as Excel or PageMaker. They can tell you how to install the packages on their equipment and how to get started but they cannot be expected to give you in depth support on using the the packages. We, on the other hand, can. Most of the people whose phone numbers are listed on page 42 are using the contents of the educational software library on a daily basis. We may have met exactly the problem you have just encountered.

If you are in difficulty, please feel free to ring anybody on the Committee; John and Helen Williams have an answering machine so you can always leave a message there. It is a great help if you are having a problem doing something using your computer if you can be next to it when you phone because it may then be possible to talk you through a solution over the phone.

If your problem is not urgent, or you think it may be difficult to explain over the phone, then do please write to the Editor with your query. I will either reply to you directly or pass your query on to a better person to solve it or publish your letter in the next magazine as a request for help.

If you have had a problem which you have solved for yourself then please share your knowledge; your solution is quite likely to be useful to someone else, even if you think it is trivial; remember that many of our members are new to using RM equipment.

Finally, you can also telephone Keith Whiddon on 0403 217339 regarding Nimbus problems or Tim Philips on 0284 706233 regarding PC186 or 380z problems. Both numbers are home numbers and we are grateful to Keith adn Tim for allowing their numbers to be published.

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News and Editorial

The big news from RM this month is that they have again cut prices significantly. The biggest price cuts in the PC186 range are for the models with hard disc drives and this is very welcome, particularly for schools wishing to run Windows on standalone machines. There is now also a PC186 with 40Mb hard drive which is a very sensible idea for a new product; 20Mb hard drives fill up very quickly (and my 10Mb drive is permanently full!) and as the 40Mb machines cost just £50 more than those with 20Mb I'd recommend them to everyone. The PC286 range has also had prices cut and 80Mb hard discs introduced (with 160Mb drives from August). 2Mb of memory is now standard for M series network machines (effectively at no extra cost because of the price cuts). The Ethernet interface is now integrated onto the main board for the PCEN286 and PCEN386 machines and this has meant price cuts for these models so that they are now the same as the corresponding Z Net models. As an example, the 2Mb TEN has come down by £309 to £1089 (and this isn't the biggest price cut!) For anyone buying a new network it definitely makes sense to buy Ethernet and if you have some PC186 computers and want to add some M Series machines you should look seriously at adding an Ethernet card to your server and running the M Series machines on a separate cable from this. There are also price cuts in memory and other accessories. If you have an X series server with only 2Mb of memory then the upgrade to 4Mb now costs just £180 and is very worthwhile; see later. The only bad news in the catalogue is that the Notebook computers are now being launched at a higher price than originally announced; the NB100 and NB201 are up £50 and the NB220 is up £100. The NB340 stays unchanged (and at just £100 more than the NB220 is a much better buy!) Apparently these changes are concerned with the sterling/dollar exchange rate which is rather out of RM's control.

There are some good changes in the CD ROM area. RM have announced an 8-16 user licence upgrade for the server software at £100 and a 16 - 100 user upgrade for £250. Both these prices make it more reasonable to run CD ROM on large networks. They have also reduced the price of the CD systems, bundled some applications with them and included a very much faster CD drive. This is very welcome. When we first got our system in school it came with nothing at all; obviously the price reflects the added software but RM have kept the price very reasonable. The network offer includes the Times and World Atlas, both licenced for 16 stations. These are both useful applications, with the Times probably the better of the two. It is good to see that the price of some CD ROM applications is starting to fall. At the moment I think that some prices are still too high but they are moving the right way.

I think I've said before that databases like encyclopaedias and newspapers are the things that I think are the most useful on CD ROM but at present newspapers seem very expensive. Considering that all the text has already been entered on a computer I would have thought that all that needed doing was to get it all in one place and then to index it. I'm probably wrong but that seems like a pretty automatic sort of job which shouldn't add much to the cost. The paper based newspapers have already made a profit for their owners so, in a way, the content of the CD ROM has already been paid for; any further income is just profit. Enough moans; the prices are falling significantly and I think they will soon be cheap enough.

I mentioned in the last issue that I had ordered a 4Mb upgrade for my server (bringing it to 6Mb). It arrived on the day the magazines were being posted and I fitted it (with not too much trouble once I realised that the plastic sleeve which makes sure you plug it in the right way round was actually wrongly fitted!) and set it up as cache memory using SmartDrive. The difference is astonishing. Programs which used to take minutes to load now load in seconds. I had thought that disc caching was only really useful on a network when all users are working on the same thing but this is not the case. [A technical digression. When you are loading any data from disc your application will ask the server for a sector of data at a time. This request is eventually translated into a read request to the hard drive which goes and looks for your little bit of data. Another user's request will then be processed, sending the disc heads off somewhere else looking for data. Your program then asks for the next bit of data so the disc heads go back to your bit of the disc and so on. This is why hard discs make the noise they do when the network is busy; the heads are constantly moving all over the surface. SmartDrive tries to improve on this by assuming that if you have just asked for a particular sector then you are likely to want the next few sectors very soon so it reads them all at the same time and holds them in memory. When your next read request comes in the data is already in memory and can be supplied immediately without having to move the disc heads. This has a second benefit because if two or more people are loading the same data then it is ready in cache memory for them once it has been read for the first person; this is why SmartDrive shows dramatic improvements for many users working on the same programs]. Windows was taking up to 15 minutes to load on my network; it now takes about 2 and all the applications are faster as well. As I said earlier, if you can afford to upgrade your server's memory then it is definitely worthwhile. Net 3 also times out if the server doesn't respond quickly enough and I found that this happened if 20 odd users tried to log on at the same time. This now doesn't happen which is another benefit. My other recent purchase is the Remote Station Printing Option Pack; see page 20 for more information about this.

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I went to the HE and FE seminar on networking and connectivity organised by RM a few weeks ago and it was very interesting. RM have claimed for years that they are a company that knows about networking and it really is true. Many companies are talking about the connections that will be possible in the future but RM are showing themnow. RM are basically supporting 3 network environments. First is RMNet which is aimed mainly at education. It is bundled with a large library of applications software and is based on the old and, therefore, stable MSNet. Second comes RMNetware which is an industry standard (used by about 60% of all IBM compatible networks) which has very high performance, is extremely secure (the server discs are not DOS formatted and cannot be looked at if you boot the server from a DOS floppy), is connectable to almost everything and has very good third party support. The final product is Lan Manager. This is what Microsoft are hoping will become an industry standard. It's gone through a number of changes and the latest release seems both stable and very good. RM will be adding their own enhancements to this to make it easier to manage (and it certainly needs this!) Lan Manager allows client/server networks. In a typical network all the user's processing is done on the station and none on the server. With Lan Manager it is possible for stations to prepare requests which are then sent to the server and processed. This has particular advantages for database searching; instead of the entire datbase being transmitted record by record across the network to be examined at the station, only the search request and result are transmitted. Obviously this needs software that can do this but this is coming. Lan Manager also allows the use of a new High Performance File System on the server. This is very much better than the traditional DOS method of file storage and is particularly optimised for network use.

In the five years since RM launched the first version of RMNet there have been more than 6 500 servers and 70 000 stations sold (which makes RM one of the largest suppliers of complete networks). A number of features make this a popular network, not the least of which is its price and the inclusion of about £5 000 worth of software in the Education Software Library. Net 3.1 improves matters even more; see the last issue for some of the features. RM were demonstrating Net 3.1 with Windows and its speed was certainly impressive (they were using a 486 server but quoting figures which suggested that a 386 server is still very good). Net 3.1 is now shipping and is another purchase that looks well worthwhile (£99 upgrade from Net 3.0).

At the seminar Dave Parker from the Department of Surveying at the University of Newcastle spoke about their network setup. His first comment that you should not install a network if you want an easy life is one that will be appreciated by most network managers. Installing a network does, however, bring benefits. In particular it allows for "distributed" computing;

in other words you can use computers where and when you want, you are not tied to using a particular machine because that is the one on which you saved the work last time. Dave was saying that they are also able to keep on using the old technology; for example they still use 480zs as dumb terminals and PC186s for word processing. A further advantage of a network is that you only need a limited number of "geniuses" who run the system and everyone else benefits. This can also be a disadvantage; do the geniuses get the credit they deserve and will you have problems if one of them leaves? There are also problems with a network because the network operating system consumes more memory than normal DOS (although RM have done much to overcome this problem) and you need more technical support than you might with standalone machines.

RM demonstrated a Lan Manager network which for the momemt is only available to FE and HE. They are intending that all users will run applications under Windows and the system shown did this. There isn't room here to describe all the features shown but it is certainly impressive and it looks relatively easy to manage (an important consideration; if a system isn't easy to manage then it doesn't get managed properly and then it won't work properly). RMNet Lan Manager should be available from the first quarter of 1992 and this will have all the ease of use features of RMNet combined with the speed and security of Lan Manager.

RM demonstrated an M series machine with a single Ethernet interface simultaneously logged onto a Unix host, Lan Manager and RM Netware. This may not seem all that useful but in a large computing environment the ability to transparently access a range of sources of information is vital and RM can now provide just that.

Just a few software items this issue; WinBasic is now in version 2. It now supports dynamic link libraries (DLLs) and can access COM ports and the Windows API (essential if you want to do serious Windows programming and indicative of Blackwell's commitment to this as a serious product). I said last month that it was cheap; it's now even cheaper at just £38 for the standard pack and £99.50 for a 16 user network licence if you buy from RM. Microsoft have just about released Visual Basic which is their Windows product; no details yet but it looks good except that it costs about £140 for a single licence. Blackwell's are on 0865 240201; Microsoft on 0734 500741

The Postcode Address File is a CD ROM containing 23.5 million addresses together with Ordnance Survey grid references, business names, Mailsort codes, and ward and NHS codes. It sounds fascinating and it's absolutely vital if you want to set up in the junk mail business and it costs a mere £2500 (including free CD drive) from WSA consultancy (0992 553341)

Much more useful is QM Record from Question Mark Computing. This allows you to plug special hardware into the parallel port of your computer and to record and playback sound. The system creates about 10k of data for each second of speech and can be used to add sound or speech to questions in Question Mark or you can just play back the recorded sound because the software generates stand alone EXE files. This means that you can even have talking batch files and, because you record the sound yourself, there is no limit to what the computer can say. Apparently you can play back through the computer's internal speaker but the quality is much better through an external loud pseaker. The full QM Record pack comprises input device, output speaker, headphones/microphone, all software and instructions and costs £199. To interface to Question Mark you need the Multi Media editor which costs a further £69. Demo discs and further information are available from Question Mark Computing at 41b Brecknock Road, London N7 0BT; 071 284 3999 (and note that this is a new address).

Omicron Software were mentioned in the last issue and I've now had time to try out a couple of the shareware products. Icon Draw is a program to let you edit the icons for Windows 3; great fun! Paint Shop is an excellent program to read a huge range of formats of graphics files, manipulate them and save in a variety of ways. Omicron are on 0702 710391

Finally, I've been sent a document on Software Copyright prepared by the National Association of Advisers for Computers in Education (NAACE). If you've not received a copy then contact RM; they sponsored it and are distributing it. It explains what a licensing agreement is and very clearly details the kinds of licensing agreement available. There is an example of the costs of producing a piece of software which shows that the price charged may not be unreasonable and there is a detailed explanation of various sections of the Copyright design and Patents Act, 1988 as it relates to computer programs. The document is very important if you are responsible for installing or looking after the software in a school; ignorance of the law is no defence and even if you are not in school the contents are a good guide to the state of copyrigh-t law.

Letter to the Editor

Further to a letter by Mr T K Boyd in the May edition of RM User regarding Turbo Pascal. His problem was that he required Read/Write access to *.BGI and *.CHR files otherwise the InitGraph routine would report that the files could not be found.

As Mr Boyd correctly assumes, it is a problem with Turbo Pascal opening the file with Read/Write permissions. Fortunately there are a couple of ways round it which Mr Boyd and others may wish to know of.

1 Convert the BGI files into OBJ files using the BINOBJ utility supplied with Turbo Pascal. The resulting object files need to be linked in to become part of the executable code. The BGI and CHR files are no longer required, creating a standalone program with graphics support. This is only really suitable for a finished program.

2 The second solution is somewhat more simple! It is possible to change the permissions and mode that Turbo Pascal uses to open files. A global variable called FileMode is provided and setting this equal to the required value will allow Turbo Pascal to open Read Only files (or whatever else is required).

Reference to a text listing MS DOS functions (e.g. the text file available on the RM Bulletin board - 0865 796431) will show that the function to open a file is 3Dh and the bits that control the access are as follows:

```
76543210
ISSSRAAA
```

I is the inheritance bit which controls whether child porocesses may inherit the use of this file. SSS are the bits which control the access given to other users on the network when they try top open the file:

```
654
000   Compatibility mode
001   Deny Read/Write (exclusive access)
010   Deny Write
011   Deny Read
100   Deny None (Everyone else has access)
```

Bit 3 is reserved

AAA are the bits which control how this process opens the file

```
210
000   Read Only
001   Write Only
010   Read/Write
```

So in order to open the BGI and CHR files we need to choose Read Only, Deny None. This gives the bits as

76543210

01000000 which is 64 in decimal (although 32 works as well)

If all that was confusing then all you need to know is that the statement

```
FileMode:=64
```

needs to go at the start of the program (after the begin for the main section or in an initialisation routine). If you need to open files later on for Read Write access then

```
FileMode:=2
```

will restore the defaults.

While on the subject of Turbo Pascal, readers may be interested to know that Borland now have a Turbo Pascal for Windows which allows the creation of full Windows applications.

We also have on the bulletin board a Pascal for Windows which will allow program development with all the benefits of Windows, the only disadvantage of it is that the code is interpreted rather than compiled.

David Taylor

Customer Support Consultant, Research Machines.

My thanks for this; thanks to the other people who let me know about it as well. Borland document their languages quite well and I had seen the mention of FileMode but didn't understand how to use it!

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The Essex Driving System

John Hollingum

Appearance to the user

This piece of software has a text-based display and can be presented in 40 or 80 columns, indeed the number of columns is controllable by the user. The layout of the screens is formal, and the number of manager-controllable items per menu is limited to 9. This is a direct consequence of the fact that they decided to allow the use of only the digit keys 0-9 to select options. Zero is reserved for 'return to previous'. You can have 35 characters to describe each item in a menu and 38 characters for a title. This means that you only have control of 353 characters on a screen that (in the case of 40 x 25 display) can display 1,000 characters. You can have plain text lines instead of menu options for menu subheads or other information if you want. The manager can select different colours from the standard ones.

The fact that there are 9 options per menu makes it possible for tree structures to be far wider than those created with the RM system. The menu trees can have as many nodes as you like. Both of these are very important improvements on the RM system; the first because it improves the 'navigability' of the menu tree by reducing the number of nodes required; the second because you can actually get all the things you want in one menu. The 80 column display contains a conventional menu on the left, and on the right, a stack of 'menu cards' to help you to orient yourself in the overall menu structure and to allow more direct backtracking up the menu tree. The 40 column display is just an expansion of the left-hand side of the 80- column display. The picture on page 13 shows a typical menu screen.

Escape seems an odd choice for changing screen mode (escape seems now to have a universally accepted meaning of 'whoops' or 'backtrack' rather than its older meaning of 'change mode'). CTRL-E seems unnecessarily technical and 'computery' and the description 'emergency exit' rather alarming. Why not something like 'E to exit driving system' or simpler, make it a menu-selection on every menu. Apart from those gripes, all the keys act the way that you would expect them to, responding to most familiar keystroke conventions.

I have tried the driving system on a Nimbus AX and a PC-186. We don't have any M series machines, but I presume they behave the same as the X series. As far as I can tell, there is only one set of EXE files for both types of machine, and it appears to be generic code that can run in the 'native' mode on both. That is to say that it runs in RM mode on the PC-186 and IBM mode on the AX.

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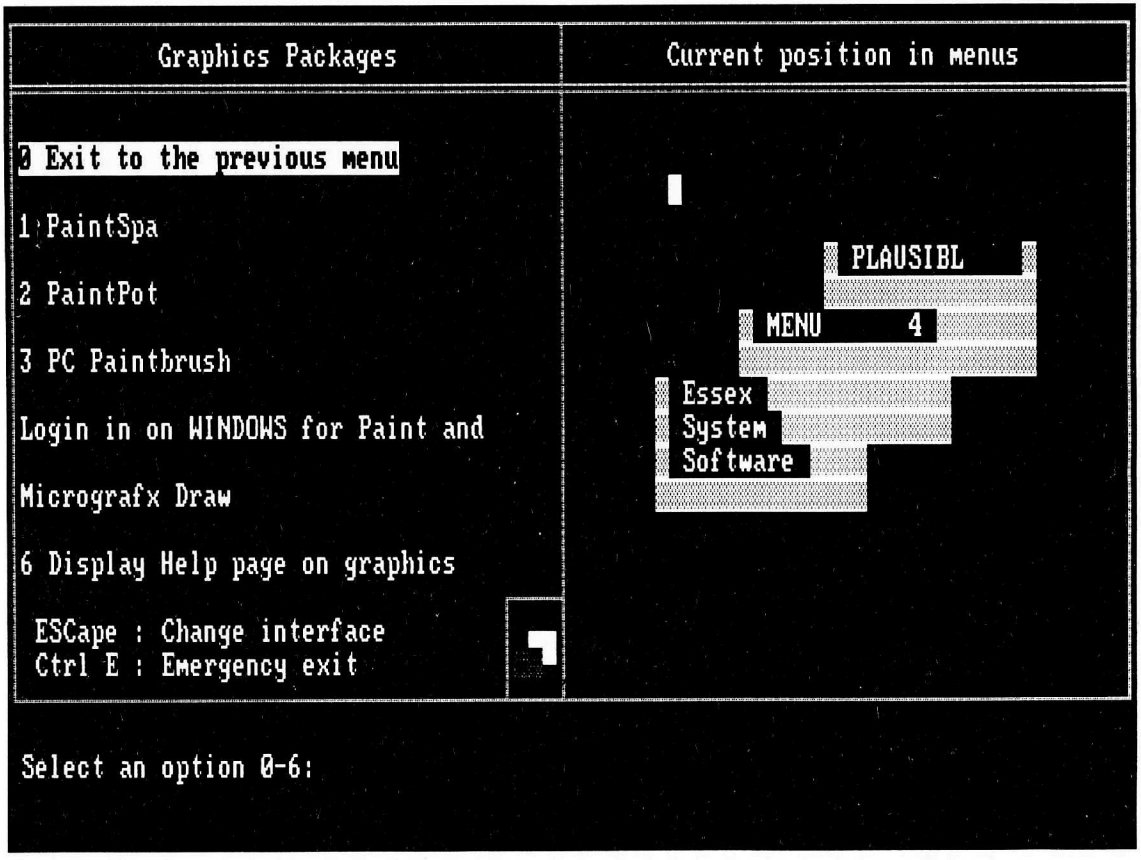

Graphics Packages
Current position in menus
0 Exit to the previous menu
1 PaintSpa
2 PaintPot
3 PC Paintbrush
Login in on WINDOWS for Paint and
Micrografx Draw
6 Display Help page on graphics
ESCape : Change interface
Ctrl E : Emergency exit
PLAUSIBL
MENU 4
Essex
System
Software
Select an option 0-6:

To achieve this the screen appears to be entirely controlled via ANSI codes giving the thing a rather spartan look. From a technical point of view, mice are handled rather differently on IBMs and PC-186s. This is quite transparent to the user so there is obviously a bit of cunning there. There is rather a nasty 'character block' mouse pointer on both machines which can only occupy character positions and jerks across the screen. This is particularly upsetting on the PC-186 as you normally see nice smooth- tracking mice.

Every appropriate part of the screen seems to be mouse-active with a couple of small exceptions, there is limited mouse-sensitivity on the menu stack (see below) and when you get a (Y/N) prompt, clicking anywhere (even on the 'Y') is taken to mean 'no'. This could be said to be a safety feature for the mouse-incompetent. The little 'overlapping pages' icon at the bottom centre of the screen allows you to get a prompt to specify a named menu page (always assuming you know what the menu is called).

In 80-column mode, a picture of your menu stack is show. It shows the menu nodes, that you passed through to get to the current one as overlapping cards. The cards have no borders so they blend into each other. The only mouse-active parts of the cards are the names. This menu stack helps people to orient themselves, especially those who seem to see menu structures as a bewildering sequence of unrelated and completely arbitrary events. I have to say I have seen this problem far more often with adults; most children have no trouble with the tree-structure concept but it is reassuring to have this 'trail of breadcrumbs' to ensure that you won't get lost in the forest and have to rely on the benevolence of a wicked witch.

If you want to display free text, you can put some into menu screens in place of option lines. Other than that, there are two facilities, one is a simple built in file-displayer, which can handle one screen (and can print it) the other is a stand-alone program that can be called up which can provide indexed access to slightly 'prepared' ascii files of any size.

The user can jump around the menu structure, by selecting different menus off the menu stack display or by specifying named menus via that funny icon in the middle. The network manager can set up the menus so that when certain programs are run, the user can supply command line arguments. This removes the necessity to allow people access to DOS for command-line oriented processes like the edit- compile-link-run sequence so beloved of computer studies students. The ways of supplying the command line parameters to programs are various: the menu system or the user can specify command line parameters and the user can edit pre-supplied parameters or use a file selector to pick filenames as parameters.

Management

I found the menu editing systems ok to use; the user interface is a smidge counter-intuitive by today's standards and I was baffled rather than upset by the fact that the mouse didn't work. In the part where you tell it how to launch programs, it was sometimes difficult to see what you were supposed to do next, the point of attention switching from a menu to a form on the same screen with little indication of what was going on. There is a 'quick' menu editor, which would serve for most purposes and a more involved one. Much of the clever stuff is to do with how to invoke programs. Sometimes things didn't get saved when I thought they had been, and sometimes it would come up with reports like 'Menu already exists' when I saved menus. I was unsure whether it thought that this was a good thing or a bad thing, or what it had decided to do about it. No doubt one gets to know these quirks, maybe I should read the manual. Ultimately no one is really going to worry if some things take a bit of getting used to in the management part as long as the functionality is there, which it is. The picture on page 16 shows an editing screen.

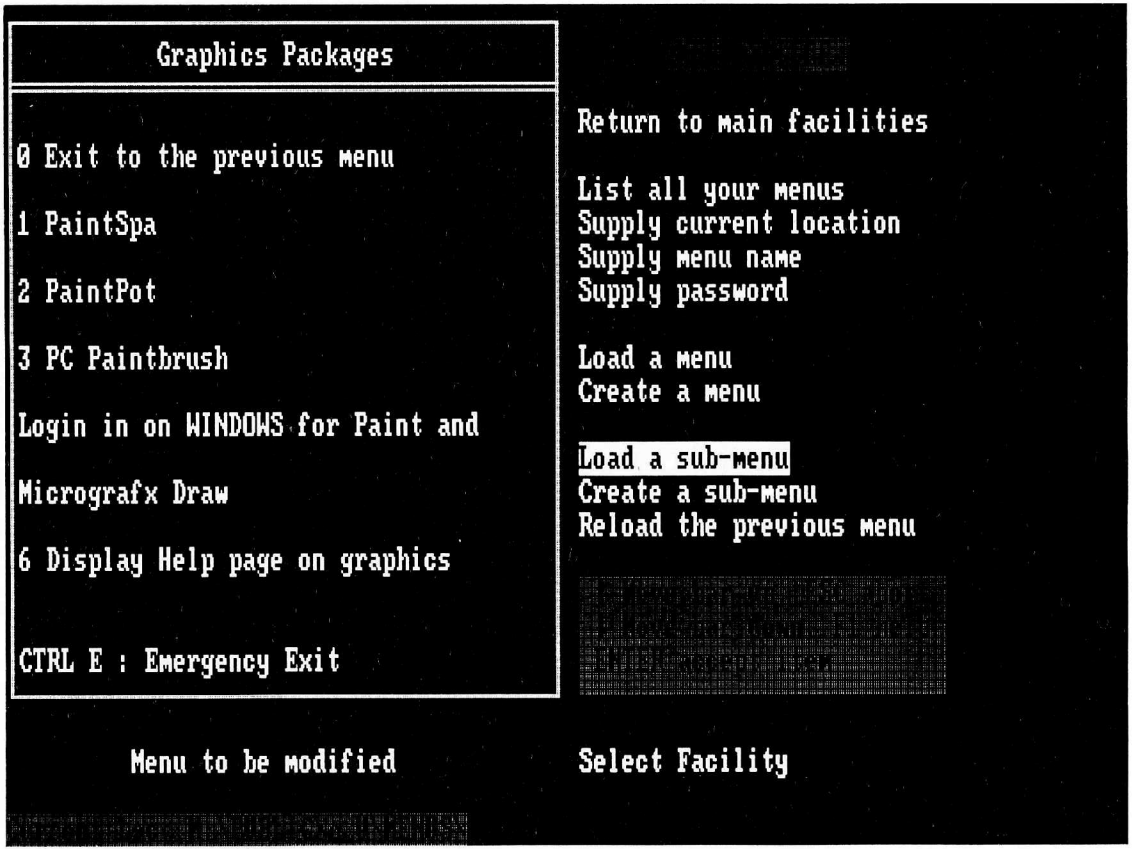
Documentation

This comes in two parts, the Installation and Maintenance (let's call it I&M) manual and the User Notes.

I found the documentation in general lapsed into technobabble now and again. It seemed to have been written by someone who was very involved with the development of it, so that underlying assumptions and novel ideas (particularly environment files) tend to be introduced as if they are an obvious and inevitable idea. Particularly in the I&M manual, there was a tendency to simplify the technical descriptions, so that they are neither good, technically informative gobbledegook nor simple everyday English.

The Installation instructions are on page 14 of the I&M manual! I do wish that people would realise, as companies like Borland do, that when someone gets a new bit of software, the most important thing is getting the thing installed; instructions for this should be put at the **front** of the manual!

The User Notes suffer from the overwhelming difficulty of trying to give step-by-step instructions on how to use a system that may be configured in several different ways and where no reference is possible to any menu that the user is actually going to see in front of them. They really are not necessary either, as the user interface is quite predictable to anyone who has ever used a computer before. I suppose the user notes might constitute a resource for people wanting to write their own user documentation, but in their present form they remind me of Spike Milligan's 40 Watt light bulb which 'when lit actually made the room darker' .


Graphics Packages
0 Exit to the previous menu
1 PaintSpa
2 PaintPot
3 PC Paintbrush
Login in on WINDOWS for Paint and
Micrografx Draw
6 Display Help page on graphics
CTRL E : Emergency Exit
Return to main facilities
List all your menus
Supply current location
Supply menu name
Supply password
Load a menu
Create a menu
Load a sub-menu
Create a sub-menu
Reload the previous menu
Menu to be modified
Select Facility

Technical bits...Program Invocation

In terms of memory conservation, this is done very well and is much better than the RM Blue screen system. In terms of avoiding the use of BAT files I found it rather disappointing; they have taken quite a step back from the RM blue screen position. Most people who have sizeable PC-186 networks are concerned about speed of response. The amount of improvement in speed that you can get by avoiding the use of BAT files wherever possible is quite remarkable. RM blue screen menus provided several facilities to help you to run .COM or .EXE programs directly, thus avoiding bat files.

..Access control

There are things called environment files; these are sort of 'profiles' for users, or groups of users and cause those users to be put in at different nodes of the same menu tree, or in completely seperate menu trees (he's out of his tree?). Environment files appropriate to a user can be automatically selected on logging in. This can be done via the group and id environment variables. Any node on a menu tree can be passworded. This doesn't mean that users have to type in a password when they enter passworded menus, it simply means that the passwords are supplied in their environment files, and all the 'halt who goes there' goes on in the background so to speak. By providing different passwords in different environment files, slightly different access can be allowed to the same menu tree for different users. If you are a security maniac you can protect environment files themselves with passwords.

I know I come from the benign environment of teacher training, where all users are paragons, if not of computer literacy then at least of good will. Even so, I feel that some aspects of Essex CCs approach to security are a bit extreme. Ok so the USE command is potentially dangerous, but only if someone has blown the system apart already. I encountered hackers in abundance when working for a large FE college in South East London and I would be more concerned with improving RMs ludicrous shortname and password assignment system rather than hiding menu descriptions.

I won't give away all the secrets of the security of the Essex driving system; suffice to say they have gone to great lengths to stop anyone getting at the menu system. Presumably this is to stop people with DOS prompt access running the driving system and selecting a menu with higher access rights than their own. Frankly if you were in a position to do that sort of thing, you could wreak havoc in much more direct ways than that anyway.

Summary

Plus points:
Quality of user interface/ ease of use
Comprehensive mouse support, help facilities, more options and nodes than RM blue screen, navigation through menu card stack, direct jumping to named menus

Technical bits
Good memory conservation, Good security

Ease of management
Can edit, test and navigate menus in one environment

Minus points:
User Interface
It looks a bit formal and forbidding, it has a nasty mouse pointer, Network manager doesn't have much control over the contents of the screen

Technical bits
No BAT file avoidance features

Ease of Management
No mouse, Difficult to see what part of the screen is active sometimes

Documentation
Tendency to over simplify some technical points

The TM Menu System
I have to own up. I have written a menu system myself, and we use it at Thames. It is for PC-186 machines. It is not the smallest of menu systems in terms of memory usage but it will work with nearly all the software we use. It is free! (well nearly) it's in the software library and the source code (Turbo Pascal 3) is available too. It will handle multiple menus, it has a very open structure and can be operated with a mouse. It is documented. It is probably most appropriate (from the user end) to Primary schools: it's colourful and uses 40 column text. From the management end, it's most appropriate to people who don't mind getting the computer equivalent of oil on their hands (whatever that is).

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A few features

A wide choice (some **very** silly indeed) of mouse pointers.

It always stays entirely resident when running so its quick but a bit bulky.

You can put loads of text on the screen.

You can get 26 options on one menu.

Lots of BAT file avoidance features

Users can be connected to different menu trees

Control of access to menus and conservation of memory is very crude compared to the Essex system, but it looks much prettier.

It has not been put together with an interest in security but should significantly improve security (as compared to DOS) when used without the external command option and by eliminating many BAT files can improve performance.

References

Milligan S *'Adolf Hitler, my Part in his Downfall'* ?Tandem (1971)

Is this the first time that Spike Milligan has been quoted in an article in RM User? Seriously, the Essex system looks interesting. Many users with large networks have found the RM menus to be too limited (or even small networks with a lot of software). There is also the problem with memory usage; RM's menu uses a lot of memory, especially on M and X series machines and prevents some packages from running. Another alternative to the RM menu is the menu system from Methodist College Belfast which I've mentioned in a previous magazine and hope to review fully in the next issue. This looks very similar to the RM menus but allows many more choices and uses very little memory. Further details of this from Edhitec (0432 871027).

John sent me a copy of the Thames Menu system and it certainly looks attractive and is easy to use. I haven't tried it yet on our network (I'm in a "if it works, don't fix it" mood at the moment) but I like the flexibility of its setup (you are not restricted to function keys; you can use all the letters and numbers as well. This allows, for example, alphabetical index pages (strongly reminiscent of Viewdata). The best (daftest?) bit is the ability to define your own mouse pointer. If you've never used a shark or a banana or even a real mouse as a mouse pointer then you really need to try this!

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Remote Station Printing Option Pack

Stephen Rochford

This rather unwieldy name describes a rather useful piece of softwaree from RM. I first mentioned it back in October and said that although the software was cheap the fact that I really needed to dedicate a computer to make best use of it made it too expensive. Well, at the end of the financial year I decided that I could afford to buy a PC186 TN and the software and I'm glad that I did.

What does it do? When you sit at a network station and print your work it goes to the server where a file is created. When you press CTRL ALT PRTSC (or a well written application closes the spool file for you) the server adds the name of your file, together with the name of the printer for which it is intended, to a queue file. A separate process on the server regularly looks at the queue file and prints the first file listed, checking the printer from time to time to see if it can take more data or if it is still busy printing the last block. In theory you can set up 10 printers on the server but only one will ever be serviced at a time. You can easily set up 2 printers; one plugged into the parallel port and one into the serial port but only one will print. This means that if you have a huge graphics file printing on one printer and a short text file waiting for the other then you've got a long wait. The software runs on a separate computer and looks at the queue file on the server. If it finds a file waiting to print then it prints it on its own local printer and it intelligently doesn't just look at the first name in the queue but checks the whole queue to see if any files are waiting for other printers.

A real example may help to make all this clearer. I have two computer rooms with the server in a room in between the two. One room has an Epson EX printer, the other has an Epson LQ and a laser printer. All these plug into a TN which is running the Printing Option Pack software. When a user logs on a small logon program decides which Epson printer should be LPT1 and does an appropriate USE; it sets the printer in the other room to be LPT2 and leaves the laser connected to LPT3. All this is transparent as far as the user is concerned. When they come to print the network adds their print file to the queue for the appropriate printer. With just the server running the file will not print if a user in the other room is currently printing. With the new software the file will print as soon as the printer in the room in which the user is working is free. This means that I don't get users repeatedly trying to print because they think something has gone wrong. Most users realise that the printer they can see working is going to print their job soon. Problems only start when the printer they can see is obviously doing nothing, even though it is switched on, and so they send their job to print again.

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In fact the printer doesn't start immediately; there is a delay of up to 30 seconds because the softwaree only reads the queue about twice a minute. In practice this causes no real problems.

While the software is running a screen shows the status of the queue and of each printer. This is constantly updated (no need to type PRINT to find out what's waiting) and the PgUp and PgDn keys can be used to scroll thorugh the list of more than 10 jobs are waiting.

You can type most of the commands with which you are familiar for controlling a printer at the keyboard (except that you don't need the word PRINT at the start; KILL PQ001 rather than PRINT KILL etc.) The server works as normal only because it has not got to service the printers other activities take place faster.

The software can be used on a station which is some way from the server. For example, if you have a group of machines a long way from the server then you can offer a printer to them on the server in the normal way and pause it. You then run the Printing Option pack on the station with it set up to print just the files for this printer. If the group of users do not all want to print then the station can be used as normal, perhaps running the software at the end of a session to print out any waiting files. You can leave the normal server printer working as usual when you do this. You can also have more than one station used serving up to three printers on each station, up to a maximum of 10 printers per server.

The software seems very reliable; I've had no problems with it during normal use except that occasionally it seems to leave files behind in the spool directory after they have been printed. This may be caused because I occasionally use PRINT KILL on the server instead of KILL on my despooling station but I'm not sure (I don't kill files that often and use the wrong keyboard even less frequently). I leave the server and station running 24 hours a day and sometimes the print station doesn't make it through the night. It seems as if the server logs off a station which doesn't do anything for a certain period of time but it doesn't always happen so I'm not sure.

In conclusion, if you have many users on your network using more than one printer then the softare is well worth buying, even if you only use it when the network is very busy to provide an extra printer.

The pack is available direct from RM (0865 791234), order code 026-207.

The Educational NoteBook

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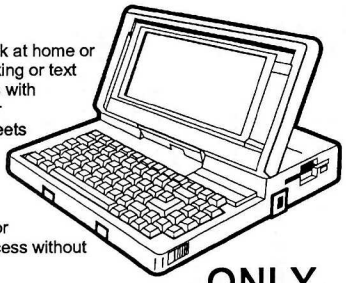

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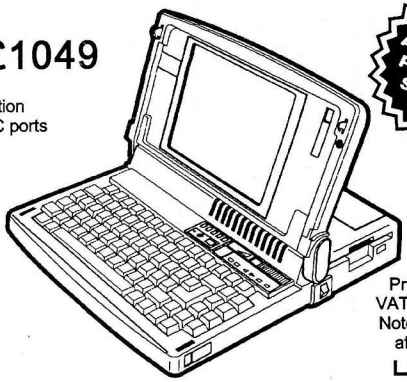

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1.1 This guide assumes that you can type and know the meaning of the shift keys etc. If you need guidance on this then read on. If you know that bit already then skip to section 2.1 staright away.

1.2 If you're reading this then I'm going to tell you all the little finicky bits about the keyboard and its quirks. Go on to section 2.1 if you're happy.

1.3 Ordinarily, the keyboard will produce lower case (small) letters; if you want a capital letter, press one of the shift keys and hold it down while typing the letter you want in capitals. You can also use the shift key to get one of the symbols which are above the numbers on the number keys.

1.4 If there's a string of capitals for a heading, for example, then press and release the Caps Lock key; now ever letter you type will come out as a capital. To go back to small letters press and release the Caps Lock key.

(Remember, it's a Caps Lock key, not a Shift Lock like on a typewriter, so even with Caps locked on you'll still need to press Shift to get the symbols. And another thing, with Caps Lock on you can press Shift to get little letters. Confused? Try it - it's not as difficult as it sounds!)

1.5 Do distinguish between the letter l (small) and the letter i (small) and the number 1. The computer doesn't have any intelligence and it can't work out which you mean if you type the wrong one by mistake. They look very similar on screen but can be quite different when printed; li1il1llill .

1.6 Make sure you also distinguish between the number zero (0) and the letter O; the computer will get confused if you don't.

1.7 The little pad of keys on the right of the keyboard is called the number keypad and it doubles up as a cursor keypad. (If you've got a new keyboard then there will be two clusters of keys; one with arrows and numbers on the far right and one with just arrows and words to the left of it. Press the Num Lock key so that the Num Lock light goes off then use either set of keys to move the cursor unless you've got a lot of numbers to put in). When you press any of the cursor keys the cursor (the flashing black bar) will move around the screen. If it doesn't move or you get numbers on the screen instead then press and let go of the Num Lock key to get back to cursor keys.

1.8 The keys auto-repeat; if you press any key and hold it then it will continue to generate the symbol or action you want, for as long as you're pressing it. It even speeds up after a second or two. This can be useful for typing a row of dots (for example) or for moving the cursor way across the screen, but it can be a bugbear if you're pressing a key while thinking and end up typingggggggggggg a lot of extra letters.

1.9 There's a key on the right with a bent arrow on it; it's sometimes labelled Enter or Return as well. When you're doing word processing only press this key if:

You want to start a new paragraph *or*

You want to select a course of action from a list on the screen or to confirm the answer to a question that the computer's asked for.

None of the clever things that word-processors can do will work properly of you press this key at the wrong times. Don't worry if you press it by mistake when you're not at the end of a paragraph - just press the backspace key (just above the Enter key) to rub it out.

1.10 Notice the key marked ESC. It's on the top row somewhere; usually at the left or right end. It's short for ESCape and will often get you out of trouble if weird things start to happen and you don't know why.

1.11 Whatever goes wrong - and things will - try not to press keys repeatedly in an attempt to get things right. If the key you pressed doesn't work first time then you'll probably goof it up more by pressing the same key again. Please be patient; it's only a machine!

2.1 Now for the real thing. Start up the computer by switching it on. If you are on a network then after a short time you will be asked for a user identity. Type in the identity you have been given to use Windows and wait a while for it to load. The next thing you will see is the *MS DOS Executive* screen (if you are running Windows 2) or the *Program Manager* screen (if you are running Windows 3.

2.2 For Windows 2 move the mouse so that the pointer is over File and click the left button. Now move the pointer over Run in the new menu and again click the left button. Finally type WRITE.EXE and press Enter. For Windows 3 just move the mouse pointer over the WRITE *icon* and click the left button twice, quickly. In both cases, the mouse pointer should change to an egg timer; this tells you that Windows is busy and you need to wait for a little while.

3.1 You can now type in some text or there may be a demonstration file available for you to load; ask for help to find out if this is the case. When you've typed some text, (for example, the first couple of paragraphs from this) try moving the mouse around in the text. If you hold the mouse so that the palm of your hand rests on the body with your thumb on one side and your ring and little fingers on the other side then your first and middle finger will rest lightly over the buttons. Your wrist should then rest comfortably on the table. Like this you will be able to move the mouse accurately and press the buttons easily.

3.2 You will see three special marks on the screen. One is a flashing vertical bar; the cursor. This marks where your typing will go if you press letters now. The second is similar but looks more like an I. This is the mouse pointer. If you move this and then click the left button then the cursor will move to the new position. The final mark looks like a four legged spider. This marks the end of your work. You cannot move past this point with the mouse or the keyboard; if you try to click beyond this point you will find that the cursor can't be moved.

3.3 Notice how the text moves out of the way when you type in the middle of existing work. Any lines which become too long automatically split after the end of the last word which will fit on the line and the rest of the text moves down to fit. This is called *word wrapping*. If you use the backspace key (the one above Enter with the <- on it) then it will rub out text that you have typed and everything moves back to fill up the gap.

3.4 That's probably the best bit about simple word processing - the ability ot edit mistakes, change words, add bits in and rub bits out; all without spoiling the appearance of the text. You can move the cursor with the cursor keypad too, though most people will find the mouse is much more versatile after a bit of practice.

The next step is to alter the appearance of some words. To do this, put the cursor at the start of a word and, **while holding down the mouse button**, drag the mouse pointer across so the word so that it goes into black, then release the button. This is called *highlighting* the word or phrase. The first time you try this you may find that the highlight slips up or down, away from the word you want. If this happens then don't panic, just keep your finger on the button and move the mouse pointer back to the right place.

Now move the mouse pointer to the top of the screen; you'll see it change to a hollow arrow as it goes over the top of the writing area. Move the pointer so that it points to the word Character and click once. Look at the *pull down menu* which appears. Choose anything from the menu by moving the mouse pointer to the word and clicking. Using this pull down menu you can choose different styles of lettering for your highlighted word.

Try it a few times to get the hang of it. Try it on a whole line of text or a paragraph or just a single letter.

If at any time the egg timer appears then wait! Rememebr that some things the computer does will take time and the egg timer shows you that it is busy. If you click on Fonts then you'll see many alternatives in addition to the ones on the pull down menu. When you choose Fonts a *dialogue box* opens up and asks you for a few responses. Click on OK when you've finished.

3.5 On the right edge of your writing there's a shaded bar with a white box in it. This is called a *scroll bar*. If you move the mouse pointer on to the white box and press and hold down the mouse button then you can move the box up and down. As you do, the text will be scrolled up and down. Don't panic if you think you've lost all your work - you've probably just scrolled it off the screen. Click on the white box and drag it up to the top. When you let go all your work will re-appear.

3.6 If you click on the shading above the white box then the text moves up one screenful, clicking below the white box moves down a screenful. Remember that the spider shape shows the end of the text; there's no more work below that.

3.7 If you click the mouse with the pointer over the black arrow at the top or bottom of the scroll bar then the text will move up or down one line at a time.

3.8 Try highlighting various areas of text, including single words; change their style etc. until you are happy with the process. (Re-read section 3.4 if you are not yet sure about highlighting).

3.9 Now move the mouse pointer to the word Document at the top of the screen and click. Choose Ruler On from the list by clicking on it. Wait a second or two and you will see a ruler appear with some boxes above it. The first two boxes are tabs, the next three are for adjusting line spacing and the third group controls justification.

We'll leave the tabs for now and concentrate on the other two sets.

4.1 The appearance of the work you have typed is called *ragged right*. This means that the left hand edge will be straight but the right hand edge isn't; each line ends at different places depending on the length of the words. Highlight a paragraph and click on each box in turn to see what it does to the text.

4.2 You'll notice that the line spacing boxes change the amount of space between each line; it can be single spaced, one and a half spaced or double spaced and the text can either be either *left aligned* (sometimes called ragged right), *centred, right aligned* or *fully justified*. Note that you'll not really see anything happen unless your highlighted paragraph is a few lines long.

5.1 The text on screen contains quite a lot of words; you are now going to see how the word processor can move sentences and paragraphs around.

5.2 Highlight a sentence using the mouse and then click on Edit in the menu bar at the top. From the menu which drops down choose Cut by clicking on it. (Notice also that some of the options are *greyed out* - this means that those choices are not available now). The sentence will disappear but it's not permanently lost.

Move your mouse pointer somewhere else in your work and click the button. Now choose Edit from the menu again and this time click on Paste. This will put back the work you just cut at the new place. Notice that if you choose Paste again then the work will be pasted a second time; unlike cutting and pasting with scissors you can paste the same thing more than once. The work stays on the *clipboard* until you cut or copy something else to it.

5.3 The top option in the Edit menu is Undo. If you click on this then it will undo the last change that you have made. For example, if you delete more work than you meant to then immediately choosing Edit Undo will put back the work you deleted; try it to see. Undo can only undo the last thing you did; if you delete a sentence and then delete a second sentence you can only get back the most recent deletion.

5.4 Edit Copy works like Edit Cut but it leaves the original text on the screen. When you choose Edit Paste you will have two copies of the same work. Try it and see for yourself.

6.1 Now for the File menu. This lets you get keep work or get back old work, it also lets you print work on the screen and start new work.

Click on File and look at the drop down menu. If you clik on New then the screen will clear and you can type in some new work (you will be asked if you want to save the work which is on screen if you have not already done so. If you click on Yes then you will be asked for a name for your work, clicking No throws away your work and Cancel leaves everything alone and goes back to normal working).

Choosing File Open will give you a list of work which has already been saved; the list may be long in which case it will have a scroll bar at the side to let you move up and down the list. Again, if you try to open a file without saving what's on screen then you will get a warning.

File Save is used to keep your work so that you can come back to it later. When you do it the first time you will be asked for a name for your work. You should give your work a name that will mean something to you later but it cannot be more than 8 letters long and cannot include spaces or most punctuation marks. The next time you use File Save your work will be saved with the name you last used.

File Save As allows you to save work with a different name. This is handy if you've opened a file, edited it and want to save it but you don't want to lose the original piece of work. If you sometimes use Word then choosing the Microsoft Word Format box will save your work in a form that Word can understand.

File Print will let you print your work. It generally prints quite slowly (because it uses the printer in a special *graphics* mode to give better results). You can also choose which pages to print if you have more than one and can choose to print in draft quality if you want the results quickly.

File Change Printer lets you choose a different printer; this is not normally necessary. File Repaginate tells Write to show you where the pages are going to end and Exit takes you out of Write, warning you as usual if you have not saved your work.

6.2 You ought now to be familiar with many of the things that Write can do; the best way to get more familiar is to practice. You may have noticed that there is a scroll bar across the bottom of the screen. You will only need to do this if you are typing very wide work (and this is note sensible unless you have a very wide printer).

7.1 The last thing you need to know is how to finish! At the top left corner of all Windows applications is a special menu heading; it looks like a box with a slot in it. Click on this and a control menu drops down. A choice in this is Exit. Choose it and you will exit Write. You now need to exit Windows. Double click on the small *icon* at the bottom of the screen (i.e. click twice, quickly) to bring it back and then click on its control menu. Choose Exit from this to finally finish in Windows.

Firstly, an apology to the author of thisarticle; I've lost the letter which came with it so I don't know who wrote it. If you wrote it then please contact me! I've said many times that I think Windows is going to be the environment for most people to use and I would welcome more articles at this level to introduce people to the applications which come with Windows. How about one on Paintbrush or Cardfile? Then what about one combining the use of all three?

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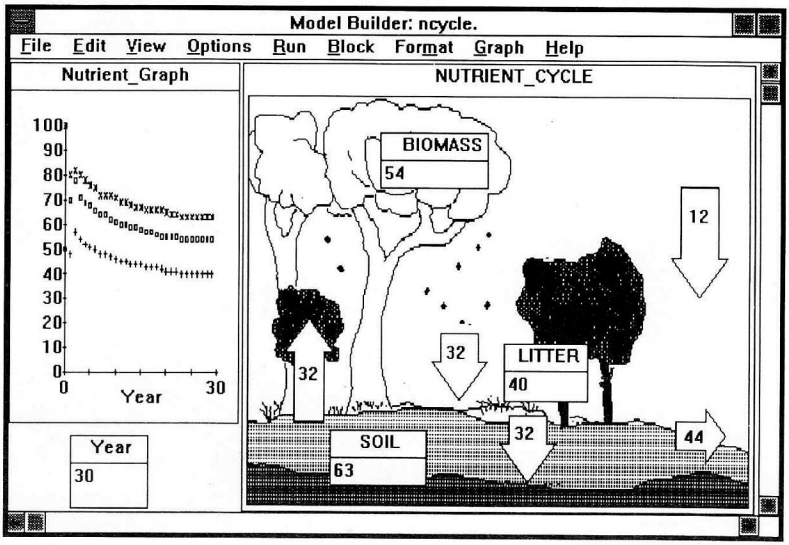

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Catchword

Stephen Rochford

Catchword is an optical character recognition program, available for use with the Scanman scanner but it can also read in saved TIFF files and then interpret them.

In use it is fairly simple. It starts up with a clean screen; from this you can select scan. To allow for the fact that the scanner is only 4" wide it is possible to scan strips left to right, right to left or vertically as well as the whole width of the sheet. When you are ready you pull the scanner steadily across the sheet to be read. A magnified image of what you are scanning appears on the screen. When you have finished you can either go to the pre-recognition phase or re-scan. I have found that the contrast setting on the scanner is quite critical but if the text looks clear on the screen then it is likely to be successfully recognised.

Pre-recognition allows you to see what Catchword thinks are single letters. It shows what it thinks are letters in a much enlarged form. If the contrast is too light then it will show lots of broken letters; if it is too dark then letters will join together to give solid blocks. If you are not happy with the appearance at this stage then you can repeat the scan process until everything looks reasonable.

During recognition the program maintains two counts on screen; objects and models. The number of objects is the total number of characters processed so far and the number of models is the number of different shapes recognised. Ideally, these numbers will be very different; after all there are only 94 different characters on the keyboard so the models number should not rise too much above this. If it does then it is probably worth re-scanning the page because the editing will be tedious.

You can now move to the next stage where a text file is generated. This shows you the text file on screen with an @ sign replacing each unidentified model. You are shown the text surrounding this and an enlarged picture of the mark on the paper. I have found that certain typefaces cause problems; for example, Prestige Elite (a common, boring typewriter face) works well except that s is always recognised as 9. This kind of problem is easy to fix; you simply tell Catch Word that the model it thinks of as a 9 is really an s and all occurrences are replaced.

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Finally, you can move into a text editor and look at the text, editing any final mistakes. This text can be saved in plain ASCII `format`, which can be read by almost all word processors or it can be translated into the format used by certain word processors (including Microsoft Word). This then allows you to finish off, perhaps changing fonts or adding other emphasis.

The program is not bad; not many years ago, optical caharacter recognition was only available for very large sums of money and could only read a limited number of fonts. Catch Word copes quite happily with (for example), duplicated copies from an original printed in 10 point Times Roman, laser printing in a mixture of sizes, typescript on a pink paper and various others. It is not thrown by underlining, bold print or italics. Its only disadvantage is that it is slow. I've not really timed it (blaming some of the slowness on lack of experience) but I suspect that if what you want is less than a page long it would probably be quicker to retype it, especially if you are a touch typist.

A niggle rather than a fault; I want a version that runs under Windows. This would make it easier to take chunks of text onto the clipboard and then staright into PageMaker or whatever.

Who needs optical character recognition? I ordered the program more out of curiosity than anything else. I didn't really expect to have very much use for it but in fact it has been very handy. Our school publishes a community newspaper and this is made up from lots of bits submitted by various people. Many of these come in typed. Once upon a time they were simply pasted up (and the result looked awful!) The next stage was to retype them and then print out the results from PageMaker. Now it is possible to scan the text, pass it through Catch Word and place the result in PageMaker. We've only done this once so I don't know whether it will prove to be a sensible way of working. Another use that I can forsee is taking extracts from newspaper articles. These can then be incorporated in other work (always assuming that copyright allows this).

Catchword is available from Edhitec for £xx.

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Hints and Tips

The TEMP variable for a PC186

If you have some PC186s which are 1.5Mb in size and have setup a silicon disk using RAMDISK.SYS then by amending P:WIN.BAT as follows substantial improvements in speed can be made.

Look for the line in P:WIN.BAT which says SET TEMP=N: then insert after it the following lines as appropriate for the machines which have silicon disc setup.

```
FOR %%A IN ( <TN machine list> ) DO IF %ADDR%==%%A set TEMP=C:
FOR %%A IN ( <PC1 & PC2 machine list> ) DO IF %ADDR%==%%A set TEMP=E:
FOR %%A IN (<machines with 3 disc drives> ) DO IF %ADDR%=%%A set TEMP=G:
etc..
```

E.g. for TN machines with addresses 67 and 110 include the following line:-

```
FOR %%A IN ( 67 110 ) DO IF %ADDR%==%%A set TEMP=C:
```

If you are not sure what letter has been allocated to the silicon disk of a particular machine, look at the screen as the mchine starts up and watch out for the message:-

RAMDISK installed on drive n:

where n is the letter of the RAM disk.

A similar procedure can be performed with other programs such as Autosketch. If any one uses Autosketch then they should use silicon disk for the storage of the ASVECT.$$$ and ASUNDO.$$$ files. Contact Mr P Fox at Ossett School, Storrs Hill Road, Ossett WF5 0DG for further details if necessary.

There is another way of setting TEMP; RM have a program called WHERESD which locates the silicon disc and sets ERRORLEVEL; you can use it in the batch file like this:

```
SET TEMP=N:
WHERESD > NUL
IF ERRORLEVEL==7 SET TEMP=G:
IF ERRORLEVEL==6 SET TEMP=F:
..
IF ERRORLEVEL==3 SET TEMP=C:
```

This method means you don't have to change the batch file if you buy more machines or alter the spec of existing machines. It is well worth making sure that the silicon disc is used in this way; it gives a sinificant speed increase to Windows applications which create temporary files.

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The FOR command

The FOR command can be used for lots of other things; e.g.

```
FOR %%A IN (*.BAK *.TMP *.$*) DO DEL %%A
```

Will delete all BAK, TMP and $* files in your current directory. You can also print files:

```
FOR %%A IN (*.PRG) DO COPY %%A+EJECT PRN
```

will copy all the PRG files to the printer, adding on a file called EJECT which is made by typing

```
COPY CON EJECT
^L
^Z
```

i.e. type CTRL L then enter, CTRL Z enter. This creates a file with a formfeed in it. This is appended in the copy command above so that each program is on a separate sheet of paper.

HILOAD on M series stations

Gaining memory on a PC286 network station: HILOAD has been mentioned here before but it can be used to gain a few more kilobytes of memory by loading some of the device drivers. There are two ways of doing this. If your network contains a mixture of machines then you can specify logon programs to work just for the PC286 machines. Alternatively, if you have only 286 machines then you can modify the MSNET.INI file in C:\NETWORK\NETX. In both cases, make sure that you have a backup of the files you are going to change (the contents of the manager's directory and the file MSNET.INI)just in case things go wrong. The logon programs to specify are:

```
#5, q:\hiload.exe /v q:\rmnimbus.sys
#5, q:\hiload.exe /v q:\mouse.sys
#5, q:\hiload.exe q:\keyb.com uk, 437, q:\keyboard.sys
```

You can delete the corresponding lines from the CONFIG.SY5 file and you must make sure that all the programs referred to are actually on drive Q: (C:\XPUBLIC) before you reboot. If you are changing MSNET.INI then you need to add the following lines after hiload sysmsgs:

```
   hiload /v rmnimbus.sys
   hiload.exe /v mouse.sys
   hiload.exe keyb.com uk, 437, keyboard.sys
```

Notice that there are no references to Q:; at this stage the station hasn't executed NETLINK and doesn't have a drive Q: but finds all its files in C:\NETWORK\NETX. Indent each line to match the ones above it. When you restart the server the stations should boot successfully.

If you use the first method you will see the various messages appear after you type in your user identity; in the second method they come before. The first method has the disadvantage that, for example, the mouse driver is reloaded each time a user logs on (even if the machine has not been reset) but this seems to cause no problem. Expect to find about 525k of free memory after these changes.

Server function keys

You probably know that pressing F3 on the server retypes the whole of the last command and F1 retypes one letter at a time but did you know that F8 types out PRINT RELEASE PQ (leaving you to just put the number), F9 types PRINT and presses Enter and F10 types PRINT KILL PQ ? I can't find any mention of this in the manual but they're handy commands to have.

Control of Windows applications

Many people know that double clicking on the control menu (that's the little box at the top left of the title bar) in a Windows application will close it, bringing up a dialogue box to ask if you want to save any open files of this is appropriate. By chance I found that double clicking on the title bar is also useful; it swaps between the normal screen for the application and the maximised screen.

Directories and Windows 3

When you open an application in Windows 3 it starts with the current directory set to be the one where it found the application (if it is on the current path) or the directory specified in Program Manager when you use File Properties to set the command line. For example, I have C:\PM\PM.EXE set as the command line for PageMaker so when I double click on the PageMaker icon the program starts and leaves me in this directory. This isn't always what is wanted. To avoid this and to specify a different start up directory make sure that your path statement includes all the directories for Windows applications (e.g. PATH C:\DOS; C:\WINDOWS; C:\PM; C:\EXCEL; C:\SB4W; C:\WINWORD) and then make the command line something like C:\PUBS\PM.EXE. When you click OK you will get a message saying that the specified path is invalid. Click on OK. The normal PageMaker icon (or whatever will disappear but PageMaker will work properly. To get back the icon, use FileProperties Change Icon. Replace the full path offered with just PM.EXE and click on Next Icon until the one you want appears (PageMaker has lots of icons in the file; most applications only have 1 or 2). Click OK until you get back to the Program Manager screen. Your normal icon will be there and your application will start as expected but leaving you in the directory you want rather than the application directory.

Multiple Printers

One of the problems of having more than one printer on a network is making sure that the correct printer driver is chosen. For example, if you select an Epson FX driver but use an Epson LQ printer then the line spacing will be slightly too big and graphics will be stretched. The way of coping with this depends on the application but here are some tips.

If the application uses a configuration file which stores the name of its printer then you can make different copies of the file as appropriate and store them in appropriate directories to which an append is made. PaintSPA is such a program. For example, suppose that machines with addresses 100-105 need the Epson LQ printer but the others need the Epson FX. This code will select the correct file.

```
echo off
cls
echo -----Loading Paintspa -----
p:\toggle off > nul
if exist paintspa.cfg goto gotconfig
append p:\paintspa\epsonfx
rem the next two lines must be typed as a single line
for %%a in (100 101 102 103 104 105) do if %addr%==%%a append
p:\paintspa\epsonlq;%da%
:gotconfig
p:
cd \paintspa
paintspa %1 %2
cd\
%dd%
p:\toggle on > nul
```

If you have PC186 machines using one printer and PC286 machines using the other printer then you can make the append decision using CHKMODE:

```
append p:\paintspa\epsonfx
chkmode /mode:rm
if errorlevel==5 append p:\paintspa\epsonlq
```

This makes no attempt to check for errors; have a look at something like the Word batch file to see the error checking which should be done.

If the application is altered by an installation program to allow a particular printer then the only way of coping with this is to have two copies of the program; FlexiWrite is an example of this. Instead of changing the append you need to change the directory to the correct location; i.e.

```
cd p:\fwrite\epsonfx
chkmode /mode:rm
if errorlevel==5 cd p:\fwrite\epsonlq
p:fwrite
```

Page Maker 4 - first impressions

Stephen Rochford

When Windows 3 was released last year Aldus quickly brought out version 3.01 of PageMaker. This was capable of running in Windows 3 standard mode but added no new functionality (just speed). PageMaker version 4 is a totally new product, with many new features and new demands in terms of machine resources. It will not run in real mode Windows 3 (so you need at least a 286 processor and 2Mb of memory) and benefits from anything better. It will use about 5Mb of disc space during installation although if you are selective about what you install then you can get away with less. Installation is straightforward; the setup program runs under Windows 3 and theonly problem occurs if you don't read the instructions. To install it you must key in the serial number. If you are upgrading then there is no serial number on the new discs or box but you must enter the serial number from the old version. I didn't know this (because I hadn't read it!) and spent ages looking for a number. During installation you will find that PageMaker can now import a much wider variety of sources, including Excel sheets and charts.

The first visible change is a coloured icon in program manager, together with an icon for Table Editor. This is a separate and excellent program whose output can easily be linked into PageMaker publications and it makes the production of tables a doddle.

A major new feature is the Story Editor; this is a fairly good word processor but it is permanently there (just click on a menu or press CTRL E to invoke it) It includes search and replace not just on text but also on formats; very useful Text handling is much improved, you can now rotate text in 90 degree steps and choose a much wider range of sizes. Publications can now be much bigger and can be indexed etc. automatically. A very nice feature concerns saving publications which are linked to external files (such as graphics or charts). When you do a Save As you have the option of copying all the linked files as well. This means that your new copy will have all the files necessary to open it, perhaps on another machine.

When opening a file there is a moving bar to give you an indication of how far the process has gone and the same sort of process happens when printing; no more wondering how much longer it's going to take. PageMaker 3 files are imported with no problem and can be saved in the new format.

PageMaker version 4 is available from RM (0865 791234) at £220 (which is a real bargain!) or you can upgrade **full** PageMaker 3 for £99.50 direct from Aldus (031 453 2211); if you have registered your copy you should have received an upgrade form from them by now.

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Writing for the Magazine

I welcome submissions for the magazine from anyone. You don't have to be a great writer to send something in; send a letter or a short tip for the Hints and Tips pages, everything is welcome.

This issue carries an article on using Windows Write; I think it would be very useful to people who have just got a system and don't really know what to do with it and I would welcome more such articles. If you feel that you can't write an article but know what you want to see then write and tell me; I can probably find someone else to write it. For example, do you want to see articles on using the other Windows applications (Cardfile, Paintbrush, Terminal etc)? Is there something about network management that you want to know? Let me know!

I'm still looking for more articles on using the Educational Software Library; RM have sold a lot of copies of it so many of you must be using it. What are you doing? How have you set things up? How do you make the software available to users? What setup do you have for your menus?

If you are writing for me then the ideal is to send me a disc produced using Word or Word for Windows but I can cope with any word processor that runs on a Nimbus (I think!). If you are using a 480z then I can take WordStar, Oxfordshire Write or plain text files and if what you are sending is short then a letter on good old fashioned paper is fine.

Finally, we pay for published articles at the rate of £5 per printed page (although all payments are at the Editor's discretion).

Advertising in the Magazine

Full and half page advertisements can be placed in the magazine and details can be obtained from the Advertising Manager. We also take classified ads and members may place free ads for surplus equipment in MicroMart.

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